

Amendments to the Claims: Please cancel claims 55, 77 and 84, amend claims 54, 83, 85, and 87 and add new claims 93-99 as follows:

Listing of Claims:

1-53. (Cancelled)

54. (Currently Amended) A method of forming a semiconductor device, comprising:

providing a first conductive layer;

providing a dielectric onto said first conductive layer, wherein the dielectric comprises tantalum pentoxide;

preventing at least some oxygen from migrating from said dielectric to said first conductive layer [in relation to said first conductive layer] by exposing the first conductive layer to a material selected from the group consisting of phosphine and methylsilane; and

providing a second conductive layer adjacent the first conductive layer after exposure of the first conductive layer to the material selected from the group. (54+55+77)

55. (Cancelled)

56. (Previously Presented) The method in claim 54, wherein said method further comprises providing the second conductive layer onto said first conductive layer; and wherein said step of preventing at least some oxygen from migrating comprises preventing at least some oxygen from migrating from said first conductive layer to said second conductive layer.

57-75. (Cancelled)

76. (Previously Presented) The method of claim 54 wherein the first conductive layer comprises at least one of tungsten nitride, polysilicon, tungsten, copper, and aluminum.

77. (Cancelled)

78. (Previously Presented) The method of claim 76 wherein the second conductive layer comprises tungsten nitride.

79. (Previously Presented) The method of claim 78 further comprising providing a third conductive layer on the second conductive layer.

80. (Previously Presented) The method of claim 79 wherein the third conductive layer comprises copper.

D' 81. (Previously Presented) The method of claim 54 wherein exposing the conductive material comprises exposing the conductive material to at least one material in the recited group under process conditions comprising:

- a flow rate of the material of about 2 sccm to about 400 sccm;
- a flow rate of about 50 sccm to about 100 sccm for an inert carrier gas;
- a temperature ranging from about 150 to about 600 degrees Celsius;
- a pressure ranging from about 50 millitorr to about 760 torr; and
- a process time ranging from about 50 to about 500 seconds.

82. (Previously Presented) The method of claim 81 wherein the inert carrier gas comprises He or Ar.

83. (Currently Amended) A method of forming a semiconductor device, comprising:

forming a first conductive layer;

providing a dielectric onto said first conductive layer;

inhibiting at least some oxygen from migrating from said dielectric to said first conductive layer ~~associating with the first conductive layer~~ by exposing the first conductive layer to a material selected from the group consisting of phosphine and methylsilane; and

forming a second conductive layer adjacent the first conductive layer after exposure of the first conductive layer to the material selected from the group. (83+84)

84. (Cancelled)

D' 85. (Currently Amended) The method in claim 83, wherein said method further comprises providing the second conductive layer onto said first conductive layer; and wherein said step of ~~[[preventing]]~~ inhibiting at least some oxygen from migrating comprises preventing at least some oxygen from migrating from said first conductive layer to said second conductive layer.

86. (Previously Presented). The method of claim 83 wherein the first conductive layer comprises at least one of tungsten nitride, polysilicon, tungsten, copper, and aluminum.

87. (Currently Amended) The method of claim ~~[[84]]~~ 83 wherein the dielectric comprises tantalum pentoxide.

88. (Previously Presented) The method of claim 83 wherein the second conductive layer comprises tungsten nitride.

89. (Previously Presented) The method of claim 88 further comprising providing a third conductive layer on the second conductive layer.

90. (Previously Presented) The method of claim 89 wherein the third conductive layer comprises copper.

91. (Previously Presented) The method of claim 83 wherein exposing the conductive material comprises exposing the conductive material to at least one material in the recited group under process conditions comprising:

- a flow rate of the material of about 2 sccm to about 400 sccm;
- a flow rate of about 50 sccm to about 100 sccm for an inert carrier gas;
- a temperature ranging from about 150 to about 600 degrees Celsius;
- a pressure ranging from about 50 millitorr to about 760 torr; and
- a process time ranging from about 50 to about 500 seconds.

D' 92. (Previously Presented) The method of claim 91 wherein the inert carrier gas comprises He or Ar.

93. (New) A method of forming a semiconductor device, comprising:  
forming a first conductive layer;  
providing a dielectric onto said first conductive layer, wherein the dielectric comprises tantalum pentoxide;

inhibiting at least some oxygen from migrating from said dielectric to said first conductive layer by exposing the first conductive layer to a material selected from the group consisting of phosphine and methylsilane; and

forming a second conductive layer adjacent the first conductive layer after exposure of the first conductive layer to the material selected from the group.

94. (New) The method of claim 93 wherein the first conductive layer comprises at least one of tungsten nitride, polysilicon, tungsten, copper, and aluminum.

95. (New) The method of claim 93 wherein the second conductive layer comprises tungsten nitride.

96. (New) The method of claim 95 further comprising providing a third conductive layer on the second conductive layer.

97. (New) The method of claim 96 wherein the third conductive layer comprises copper.

D' 98. (New) The method of claim 93 wherein exposing the conductive material comprises exposing the conductive material to at least one material in the recited group under process conditions comprising:

- a flow rate of the material of about 2 sccm to about 400 sccm;
- a flow rate of about 50 sccm to about 100 sccm for an inert carrier gas;
- a temperature ranging from about 150 to about 600 degrees Celsius;
- a pressure ranging from about 50 millitorr to about 760 torr; and
- a process time ranging from about 50 to about 500 seconds.

99. (New) The method of claim 98 wherein the inert carrier gas comprises He or Ar.

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